

What is claimed is:

- 1 1. A junction assembly for use at a junction between a lateral branch and a main
2 well bore, comprising:
3 a template having a lateral window for positioning proximal the junction;
4 a connector adapted to be sealably engaged to the template, a portion of the
5 connector extending through the lateral window; and
6 plural flow paths comprising a first flow path in communication with the lateral
7 branch, and a second flow path in communication with a portion of the main well bore.
- 1 2. The junction assembly of claim 1, further comprising a flow control assembly
2 coupled to the flow paths to control fluid flow through the flow paths.
- 1 3. The junction assembly of claim 2, wherein the flow control assembly comprises a
2 Y-shaped flow device.
- 1 4. The junction assembly of claim 2, wherein the flow control assembly comprises
2 valves adapted to control flow in the flow paths.
- 1 5. The junction assembly of claim 4, wherein the valves are adapted to be
2 independently controlled.
- 1 6. The junction assembly of claim 4, wherein the valves are adapted to be remotely
2 operable.
- 1 7. The junction assembly of claim 1, wherein the plural flow paths comprise
2 separate flow conduits.
- 1 8. The junction assembly of claim 7, wherein the plural flow conduits are isolated
2 from each other.

1 9. The junction assembly of claim 7, wherein the main well bore extends from a well
2 surface, and wherein the separate flow conduits extend substantially to the well surface.

1 10. The junction assembly of claim 1, wherein the second flow path is adapted to
2 extend below the junction for communication with the portion of the main well bore located
3 below the junction.

1 11. The junction assembly of claim 1, wherein one of the first and second flow paths
2 includes an annular path around the other one of the first and second flow paths.

1 12. The junction assembly of claim 1, further comprising a connection assembly
2 adapted for positioning below the junction, the connection assembly adapted to sealably engage
3 the first flow path.

1 13. The junction of claim 12, wherein the first flow path comprises a first flow
2 conduit, and the connection assembly comprises a seal bore to sealably receive the first flow
3 conduit.

1 14. The junction assembly of claim 13, wherein the connection assembly comprises
2 another seal bore to sealably receive the template.

1 15. The junction assembly of claim 1, wherein the plural flow paths comprise plural
2 flow conduits, and the connector has a portion having an inner diameter to receive the plural
3 flow conduits.

16. A method of completing a well having a junction between a lateral branch and a main bore, comprising:

- 1 installing a template having a lateral window proximal the junction;
- 2 sealably engaging a connector to the template;
- 3 providing a portion of the connector through the lateral window of the template;
- 4 and
- 5 providing plural flow paths comprising a first flow path to communicate with the
- 6 lateral branch, and a second flow path to communicate with a main bore section.

1 17. The method of claim 16, wherein providing the second flow path comprises
2 providing the second flow path to communicate with the main bore section below the junction.

1 18. The method of claim 17, wherein providing the plural flow paths comprises
2 providing plural flow conduits.

1 19. The method of claim 16, further comprising engaging a distal end of the
2 connector with equipment in the lateral branch.

1 20. The method of claim 16, wherein the second flow path comprises a flow conduit,
2 the method further comprising providing a connection assembly below the junction, and sealably
3 engaging the flow conduit in the connection assembly.

1 21. The method of claim 20, further comprising sealably engaging the template in the
2 connection assembly.

1 22. The method of claim 16, wherein the plural flow paths comprise plural flow
2 conduits, the method further comprising coupling a flow control assembly to the flow conduits to
3 control fluid flow through the flow conduits.

1 23. The method of claim 22, further comprising actuating valves in the flow control
2 assembly to control fluid flow through the flow conduits.

1 24. The method of claim 23, wherein actuating the valve comprises independently
2 actuating the valves.

1 25. The method of claim 23, wherein actuating the valves comprise remotely
2 actuating the valves.

1 26. The method of claim 22, wherein coupling the flow control assembly comprises
2 coupling a Y-shaped flow device to the plural flow conduits.

1 27. The method of claim 16, wherein providing the plural flow paths comprises
2 installing at least one flow conduit through the template.

1 28. The method of claim 16, wherein the main bore extends from a well surface, the
2 method further comprising providing separate flow paths through the flow conduits to
3 substantially the well surface.

1 29. A completion system comprising:
2 a lateral branch junction assembly for positioning proximal a junction of a lateral
3 branch and a main well bore and comprising a template having a lateral window and a lateral
4 branch connector adapted to sealably engage the template, a portion of the lateral branch
5 connector extending through the lateral window,
6 the lateral branch junction assembly further comprising at least a first flow path
7 and a second flow path, the first flow path in communication with the lateral branch, and the
8 second flow path adapted for communication with a main well bore section.

1 30. The completion system of claim 29, wherein the second flow path is adapted for
2 communication with the main well bore section below the junction.

1 31. The completion system of claim 29, further comprising a flow control system
2 adapted to control fluid flow through the flow paths.

32. The completion system of claim 29, wherein the second flow path comprises a flow conduit, and the lateral branch junction assembly further comprises a connection apparatus for sealably engaging the flow conduit and the template.

1 33. A junction assembly for use at a junction between a lateral branch and a main
2 well bore, comprising:
3 a first part adapted to sealably engage to a second part;
4 the first and the second part adapted to be disposed proximal the junction;
5 at least a portion of the second part extending into the lateral branch; and
6 plural flow paths comprising a first flow path in communication with the lateral
7 branch, and a second flow path in communication with a portion of the main well bore.